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The man-made artificial world around us, to create a safer and more convenient life for the majority of people, is the result of human brains, of engineers, economists, politicians – and the society as well. Technology in the transport and information sector was developed exponentially over the last two centuries – and implemented with enthusiasm. We have interfered into the complex system of nature and society without knowing the system reaction and system effect. Transport planning, as well as urban- and land-use planning, is mainly based on plausible assumptions, extrapolation of personal experience and standards based on general agreement. Unwanted effects, accidents, air and noise pollution, environmental degradation, economic problems to finance and operate transport and urban systems, social problems, loss of local opportunities for jobs are indicators that this man-made environment has become complex in itself and even more complex in its interaction with the social and natural environment. These systems have not only overgrown our societies but can also endanger human future.

The infrastructure of the transport system was based on simple economic, strategic and/or political decisions. The success of railways, cars, airplanes tells its own tale. The flipside of this coin was not visible soon – one of the problems of dynamic complex systems – time delay. Exponential growth is an indicator that the eigendynamic of the system is out of control. Making the system bigger and bigger, will and cannot solve the inherent problems. The “lab” in urban and transport planning is the reality. And most of the transport and urban structures have long lasting effects. It is therefore important to find methods and tools to support decisions based on objective basic principles. One of the tools for a better understanding of the system behavior is models, since there is no laboratory available, where we can test the behavior of a city, a region, a country, or even of a harbor or airport.

Theories, mathematical-statistical models, dealing with multicriteria problems, in different disciplines like psychology were available, but not common in practice. First of all, there was a lack of data and even more important, there were no capable and easy to handle computers. But it is not enough to develop/build and test models, it is of equal importance to publish them. During the last 40 years a vast number of publications about modelling appeared in the literature. Very few of them have been applied in practice. Desk work is easier than the bloody time-consuming and expensive data collection. The combination of both is a piece of luck, as it happened in some chapters of this book.

There are professional books, you read with some concentrated attention, there are books you have to read, textbooks for example and there are books you read and you use it, at least from time to time. It depends on the content. 15 chapters seem to be difficult to accomplish. But the grouping into “Transport Mode Specific Decision Support Systems”, “Decisions in Urban Transportation” and “Sustainability/Environmental Risks of Transport,” as well as the content of the single chapters make the book good
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readable and the reader curious. Even if you are building models since decades and using them in different field of professional practice it is a pleasure to find some well known models used in another environment and several interesting others. The elaborated references of each of the topics are a good source for researchers, practitioners and students. The book belong to the group of books you will pick it up from your book-shelf more often than once.

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